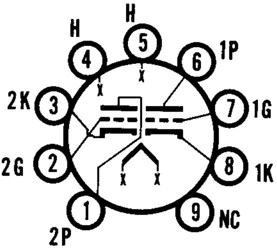


SYLVANIA TYPE 6EV7

DUOTRIODE



9LP

MECHANICAL DATA

Bulb	T-6½
Base	E9-1, Miniature Button 9-Pin
Outline	6-3
Basing	9LP
Cathode	Coated Unipotential
Mounting Position	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS AND RATINGS

Characteristics

Heater Voltage[1]	6.3 Volts
Heater Current[2]	600 Ma

Ratings (Design Maximum Values)

Heater Voltage[3]	6.3 ± 0.6 Volts
Maximum Heater-Cathode Voltage	
Heater Negative with Respect to Cathode	
Total D C and Peak	200 Volts Max.
Heater Positive with Respect to Cathode	
D C	100 Volts Max.
Total D C and Peak	200 Volts Max.

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

	Section 1[4]	Section 2[4]
Grid to Plate	3.4	3.4 μμf
Input: g to (h+k)	3.0	3.0 μμf
Output: p to (h+k)	0.33	0.23 μμf

Ratings (Design Maximum Values) Each Section

Relay Control Service

Plate Voltage	300 Volts Max.
Plate Dissipation[5]	2.5 Watts Max.
Plate Dissipation[6]	4.5 Watts Max.
Positive Grid Voltage	0 Volts Max.
Cathode Current	20 Ma Max.
Grid Circuit Resistance	3.9 Megohms Max.

CHARACTERISTICS AND TYPICAL OPERATION

Class A1 Amplifier—Each Section

Plate Voltage	250 Volts
Grid Voltage	−2 Volts
Plate Current	9.2 Ma
Transconductance	5200 μmhos
Amplification Factor	60
Plate Resistance	11,500 Ohms
Ec for Ib = 100 μa	−9 Volts

RELAY CONTROL OPERATION (Each Section)

	"ON" Time More Than 30 Sec. in Any 2 Min. Interval	"ON" Time Less Than 30 Sec. in Any 2 Min. Interval
Plate Supply Voltage	150	250 Volts
Zero Bias Plate Current	10	18.5 Ma
Plate Lead (Relay)	2500	2500 Ohms
Ec for Ib = 100 μa (approx.)	−5	−9 Volts

NOTES:

1. For parallel operation of heaters, equipment should be designed that at normal supply voltage bogey tubes will operate at this value of heater voltage.
2. The bogey value of current is obtained when operating the heater at the specified 6.3 volts.
3. Heater voltage supply variations shall be restricted to maintain heater voltage within the specified tolerance.
4. Section No. 1 connects to Pins 6, 7, and 8.
   Section No. 2 connects to Pins 1, 2 and 3.

5. Plate dissipation can be as high as 2.5 watts when the "ON" time exceeds 30 seconds in any 2 minute interval.
6. Plate dissipation can be as high as 4.5 watts when the "ON" time does not exceed 30 seconds in any 2 minute interval.

APPLICATION

The Sylvania Type 6EV7 is a miniature high-mu twin triode having separate cathodes. It is designed for service as a relay-control tube in remote tuning units of television receivers.